AMENDMENT TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for reading data from a memory card that provides non-volatile data storage having an address space defined by a contiguous range of addresses, said method comprising:

(a) accessing volume information stored in a range of addresses that is a part of the contiguous range of addresses that defines the address space;

(b) determining, based on the volume information, whether the non-volatile data storage has a first configuration having a multiple volume address space corresponding to a first file format or a second configuration having a single volume address space corresponding to a second file format;

(c) operating the memory card in accordance with the first file **format** ~~form~~ by dividing the address space of the non-volatile data storage into a plurality of volumes when said determining (b) determines that the memory card has the first configuration, each of the plurality of volumes containing the volume information stored in a respective range of addresses therein; and

(d) operating the memory card in accordance with the second file format by accessing the entire address space of the non-volatile data storage as the single volume when said determining (b) determines that the memory card has the second configuration,

wherein each range of addresses which stores the volume information in a second and any subsequent volumes under the first configuration stores user data under the second configuration, the volume information in the second and any subsequent volumes under the first configuration not being preserved when the memory card is operated under the second configuration.

2. (Previously Presented) A method as recited in claim 1,

wherein the memory card includes a switch that has a plurality of switch positions, and

wherein said operating (c) includes at least:

(c1) determining a switch position for the switch; and

(c2) selectively enabling one of the plurality of volumes based on the switch position.

3. (Previously Presented)   A method as recited in claim 2,

wherein the switch has at least a first position and a second position, and

wherein said operating (c) further includes at least:

(c3) imposing an address offset when the switch is in the second position.

4. (Original) A method as recited in claim 3, wherein the address offset enables the memory card to provide more data storage capacity than available with a file system using 16-bit addressing.

5. (Previously Presented) A method as recited in claim 2,

wherein the switch has at least a first position and a second position,

wherein, when the switch position is in the first position and the memory card is operated by dividing the address space of the non-volatile data storage into the plurality of volumes, the first volume of the non-volatile data storage is accessed, and

wherein, when the switch position is in the second position and the memory card is operated by dividing the address space of the non-volatile data storage into the plurality of volumes, a second volume of the non-volatile data storage is accessed.

6. (Original) A method as recited in claim 5, wherein the memory card is formatted into either one of a single volume or a pair of volumes, the pair of volumes being the first volume and the second volume.

7. (Original) A method as recited in claim 6, wherein the total non-volatile data storage for the memory card is formatted into the first volume of X gigabytes as the single volume, or formatted into the first and second volumes of X/2 gigabytes each as the pair of volumes.

8. (Original) A method as recited in claim 1, wherein said method further comprises:

(e) detecting activation of the memory card, and

wherein said accessing (a), said determining (b), and said operating (c) or (d) are performed once said detecting (e) detects the activation of the memory card.

9. (Original) A method as recited in claim 8, wherein the activation of the memory card occurs upon power-on of the memory card or upon insertion of the memory card into a host device.

10. (Original) A method as recited in claim 1,

wherein the memory card is formatted into a single volume or a plurality of volumes, and

wherein the total non-volatile data storage for the memory card is formatted into the first volume of X gigabytes as the single volume, or formatted into the N volumes of X/N gigabytes each as the plurality of volumes.

11. (Previously Presented) A method as recited in claim 1, wherein when said determining (b) determines that the single volume address space is present on the memory card, the first volume has a FAT-32 file format.

12. (Previously Presented) A method as recited in claim 1, wherein when said determining (b) determines that the multiple volume address space is present on the memory card, each of the multiple volumes has a FAT-16 file format.

13. (Previously Presented) A memory card having a single memory array defined by a contiguous range of addresses capable of being configured as multiple partitions each having a first size or as a single partitions having a second size, said memory card comprising:

non-volatile data storage that provides data storage having an address space, said address space includes at least a first partition, the first partition including partition information that is stored in a range of addresses that is a part of the contiguous range of addresses, the contiguous range of the addresses being capable of storing either the partition information or user data depending on a configuration of the memory card;

a switch being set in one of a plurality of switch positions; and

a controller that manages access to the data stored in said non-volatile data storage,

wherein said controller examines the partition information stored in said first partition to determine whether the memory card has a first configuration using the single partition in accordance with a first file format or a second configuration using the multiple partitions in accordance with a second file format based on the partition information,

wherein when said controller determines that the memory card has the first configuration, the controller provides access to the address space of said non-volatile data storage by dividing the address space into multiple partitions and selecting one of the multiple partitions based on the

switch position of the said switch, each of the plurality of partitions containing the partition information stored in a respective range of addresses therein,

wherein when said controller determines that the memory card has the second configuration using the single partition, the controller provides access to the entire address space of said non-volatile data storage as a single partition, the first partition being the single partition,

and wherein said controller accesses, under the second configuration, each of the respective ranges of addresses in a second and any subsequent partitions under the first configuration to store user data, said controller does not preserve the volume information in the second and any subsequent partitions under the first configuration when said controller accesses the entire address space as the single partition under the second configuration.

14. (Original) A memory card as recited in claim 13, wherein the one or more partitions are volumes.

15. (Previously Presented)   A memory card as recited in claim 13, wherein said second configuration has a FAT-32 file format.

16. (Previously Presented)   A memory card as recited in claim 13, wherein said first configuration has a FAT-16 file format.

17. (Original) A memory card as recited in claim 13,

wherein said memory card is formatted into either a single partition or a plurality of partitions, and

wherein the total non-volatile data storage for said memory card is formatted to a first partition of X gigabytes as the single partition, or formatted into the N partitions of X/N gigabytes each as the plurality of partitions.

18. (Original) A memory card as recited in claim 13, wherein said memory card is a FLASH memory device.

19. (Previously Presented)   A memory device that provides non-volatile data storage having an address space defined by a contiguous range of addresses, said memory device comprising:

means for accessing volume information stored in a range of addresses that is a part of the contiguous range of addresses that defines the address space, the contiguous range of the

address space being capable of storing either the volume information or user data depending on a configuration of the address space;

means for determining whether the memory device has a first configuration using a multiple volume address space corresponding to a first file format or a second configuration using a single volume address space corresponding a second file format based on the volume information; and

means for operating said memory device based on the configuration of said memory device, including:

means for dividing the address space of the non-volatile data storage into multiple volumes if said means for determining determines that the memory device has the first configuration, each of the multiple volumes containing the volume information stored in a respective range of addresses therein; and

means for accessing the entire address space of the non-volatile data storage as a single volume if said means for determining determines that the memory device has the second configuration, wherein each range of addresses which stores the volume information in a second and any subsequent volumes under the first configuration stores user data under the second configuration, said means for accessing does not preserve the volume information in the second and any subsequent volumes under the first configuration not when the memory device is operated under the second configuration.

20. (Previously Presented)   A memory device as recited in claim 19,

wherein said means for operating operates said memory device in a first mode when said means for determining determines that the multiple volume address space is present on said memory device, and

wherein said means for operating operates said memory device in a second mode when said means for determining determines that the single volume address space is present on said memory device.

21. (Original) A memory device as recited in claim 20, wherein said memory device further comprises a switch means that permits user selection of one of the first mode and the second mode.

22. (Previously Presented)   A memory device as recited in claim 19, wherein said means for operating operates said memory device as providing only the first volume when said means for determining determines that the single volume address space is present on said memory device.

23. (Previously Presented)   A memory device as recited in claim 19, wherein said means for operating operates said memory device as providing a plurality of volumes when said means for determining determines that the multiple volume address space is present on said memory device, one of the plurality of volumes being the first volume.

24. (Original) A memory device as recited in claim 19, wherein said memory device is a memory card.

25. (Original) A memory device as recited in claim 19, wherein said memory device is a FLASH memory device.

26 – 35. (Canceled)

36. (Previously Presented)   A method as recited in claim 1, wherein said (c) operating the memory card in accordance with the first file format includes:

mapping first volume information onto a first address region of the address space;

mapping second volume information onto a second address region of the address space, the second address region following the first address region;

mapping first user data region for the first volume onto a third address region of the address space, the third address region following to the second address region; and

mapping second user data region for the second volume onto a fourth address region of the address space, the fourth address region following to the third address region,

and wherein said (d) operating the memory card in accordance with the second file format includes:

mapping volume information for the single volume onto a fifth address region of the address space, the fifth address region preceding the first address region; and

mapping user data region for the single volume onto the second, third, and fourth address regions of the address space.`

37. (Previously Presented)   A memory card as recited in claim 13, wherein when said controller determines that the memory card has the first configuration, said controller maps first volume information onto a first address region of the address space, maps second volume information onto a second address region of the address space, the second address region following the first address region, maps first user data region for the first volume onto a third address region of the address space, the third address region following to the second address region, and maps second user data region for the second volume onto a fourth address region of the address space, the fourth address region following to the third address region,

and wherein when said controller determines that the memory card has the second configuration, said controller maps volume information for the single volume onto a fifth address region of the address space, the fifth address region preceding the first address region, and maps user data region for the single volume onto the second, third, and fourth address regions of the address space.

38. (Previously Presented)   A memory device as recited in claim 19, wherein said means for dividing the address space into multiple volumes includes:

means for mapping first volume information onto a first address region of the address space;

means for mapping second volume information onto a second address region of the address space, the second address region following the first address region;

means for mapping first user data region for the first volume onto a third address region of the address space, the third address region following to the second address region; and

means for mapping second user data region for the second volume onto a fourth address region of the address space, the fourth address region following to the third address region,

and wherein said means for accessing the entire address space as the single volume includes:

means for mapping volume information for the single volume onto a fifth address region of the address space, the fifth address region preceding the first address region; and

means for mapping user data region for the single volume onto the second, third, and fourth address regions of the address space.